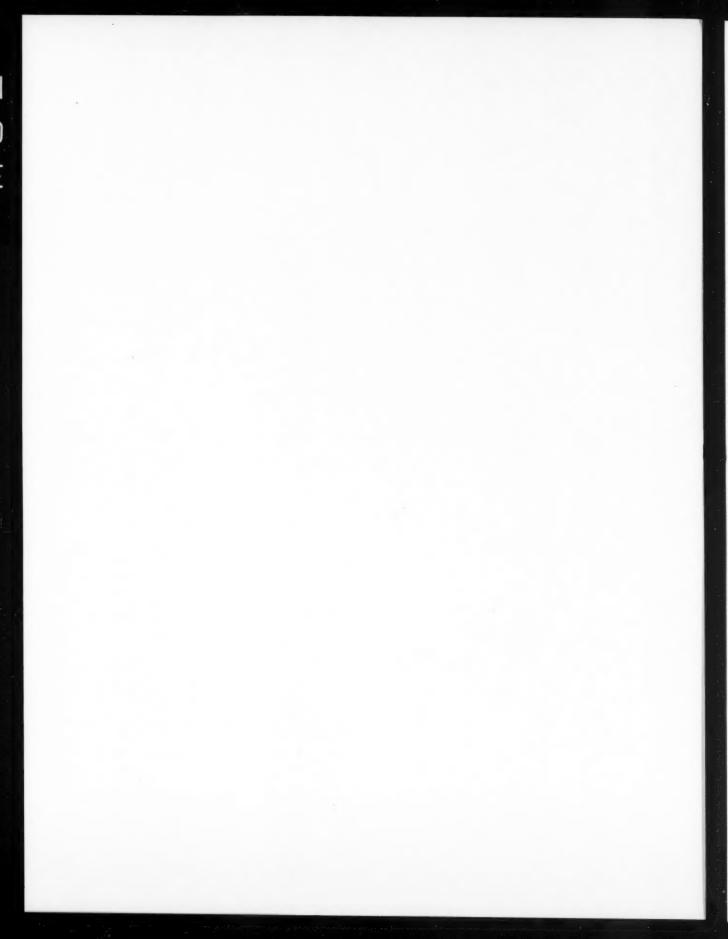
INDEX

THE SOVIET JOURNAL OF ECOLOGY

Volume 7, Numbers 1-6, 1976



## THE SOVIET JOURNAL OF ECOLOGY Volume 7, Numbers 1-6, 1976

(A translation of Ékologiya)

## A

Aizatullin, T. A. - 291
Aleksakhin, R. M. - 195, 283, 571
Alekseev, A. F. - 558
Amstislavskii, A. Z. - 164, 279
Anapiev, I. M. - 208
Arutyunov, R. S. - 21
Asenov, G. A. - 558
Ataev, E. A. - 261
Atkin, A. S. - 391
Avrova, N. P. - 74

## B

Babitskii, V. A. - 425 Bakunov, N. A. - 350 Balakhonov, V. S. - 370 Barbashova, Z. I. - 142, 149 Beloshitskii, P. V. - 142 Belova, Z. V. - 53 Belyaev, V. I. - 565 Berdyev, B. B. - 522 Berger, L. - 120 Berman, D. I. - 181 Beskrovnyi, M. A. - 135 Bobovich, M. A. - 368 Bochenina, N. V. - 552 Bogdanov, O. P. - 324 Bogoslava, G. F. - 142 Byazrov, L. G. - 159 Bykov, B. A. - 311

## C

Chebotina, M. Ya. - 95 Chernitskii, A. G. - 43 Chesnokov, N. I. - 535 Christian, John J. - 9

## D

Davis, David E. - 9 Davydenko, I. A. - 468 D'yachenko, A. P. - 71 Dymina, G. D. - 217

#### E

Erdakov, L. N. - 489 Ermolaev, V. I. - 306 Ershov, V. V. - 241 Eshelkin, I. I. - 556

## F

Fedoseev, G. A. - 439 Filatova, R. Ya. - 264 Foulquier, L. - 495

## G

Garanina, S. N. - 350 Gedykh, V. B. - 547 Geraskin, P. P. - 541 Ginzburg, L. R. - 195 Glazov, M. V. - 573 Glushankova, M. A. - 374 Golubev, V. M. - 554 Golubev, V. N. - 513 Gorchakovskii, P. L. - 284 Grauby, A. - 495 Grigor'eva, G. I. - 332

## I

Iskandaryan, M. A. - 33 Ismailov, V. Ya. - 480 Ivanov, I. V. - 149 Izhevskii, S. S. - 363

#### K

Kalabukhov, N. I. - 125 Karavaeva, E. N. - 172, 281 Kas'yanov, V. L. - 460 Khailov, K. M. - 291 Khapaev, S. A. - 86 Khavkina, I. V. - 149 Khaziev, F. Kh. - 525 Khlebnikova, I. P. - 178 Khlistovskii, E. D. - 480 Khuras'kin, L. S. - 57 Kishchinskii, A. A. - 447 Kititsyna, L. A. - 475 Klimov, V. I. - 366 Kobechinskaya, V. G. - 513 Kononenko, A. P. - 181 Korobeinikov, Yu. I. - 372 Korotkov, Yu. M. - 278 Korotkova, E. B. - 278 Kovshar', A. F. - 269 Krasnov, N. A. - 162 Krivonosov, G. A. - 232 Krylov, D. G. - 57 Krylova, T. V. - 57 Kryuchkova, N. M. - 62 Kulagin, Yu. Z. - 111, 575 Kulikov, N. V. - 175, 552

Kurkin, K. A. - 483 Kuz'michev, A. I. - 468 Kuznetsov, G. V. - 573

## L

Ladinskaya, L. A. - 21 Leont'ev, V. G. - 332 Lobkov, E. G. - 550 Lopatin, V. D. - 241 Loshkarev, G. A. - 275 Luk'yanenko, V. I. - 541

## M

Makarenko, A. A. - 391 Maksimova, T. G. - 374 Mamseva, N. V. - 252 Marchyulenene, D. P. - 170 Markova, E. K. - 48 Marinina, L. S. - 560 Mednik, I. G. - 195 Michurina, L. R. - 228 Mirkin, B. M. - 222 Mironov, B. A. - 25 Mochek, A. D. - 77 Monakov, A. V. - 93 Monastyrskii, O. A. - 324 Molchanova, I. V. - 95, 172, 281, 552 Mukhin, V. A. - 519

#### N

Nakhutsrishvili, G. Sh. - 256
Naumov, N. P. - 188
Naumova, L. G. - 222
Nazarov, S. K. - 157
Nekrasova, L. S. - 167
Neronov, V. M. - 286
Nesterenko, N. V. - 37
Nifontova, M. G. - 68
Nikolaeva, A. N. - 403
Nikolaeva, T. A. - 183
Nikol'skii, I. D. - 103
Novozhenov, Yu. I. - 289

#### 0

Odinak, Ya. P. - 287 Odinashoev, A. - 80 Ogurtsov, G. I. - 366 Ozhegov, L. N. - 175 Pankevich, T. P. - 473 Parfenov, Yu. D. - 21 Pavel'eva, E. B. - 252 Pesenko, Yu. A. - 98 Peshkova, N. V. - 485, 570 Petrova, B. K. - 338 Petrunek, N. P. - 272 Petrunek, V. L. - 272 Pisarenko, S. S. - 185 Pokarzhenskii, A. D. - 192 Polikarpov, G. G. - 170 Polyakova, V. I. - 154 Popkov, A. F. - 125 Popov, D. K. - 21 Popov, V. N. - 83 Poslavskii, A. N. - 232 Pridnya, M. V. - 318 Prikhod'ko, T. I. - 1 Pristavko, V. P. - 272 Prokhazka, I. - 142, 149 Prokhorov, V. M. - 195 Purtov, S. M. - 556

## R

Rabotnov, T. A. - 382 Radakov, D. V. - 77 Rafes, P. M. - 88 Ravkin, Yu. S. - 430 Reva, M. L. - 264 Rogova, T. V. - 356 Rosenberg, G. S. - 222 Ryabitsev, V. K. - 377 Ryzhanovskii, V. N. - 377

S

Sal'nikov, L. P. - 183 Sapozhnikov, A. P. - 29 Sbikin, Yu. N. - 77 Seledets, V. P. - 107 Semerikov, L. F. - 395 Seraya, G. P. - 212 Sergeeva, É. P. - 374 Sergeeva, O. A. - 475 Shadrina, V. I. - 489 Sheikina, N. V. - 125 Shiryaev, V. V. - 276 Shubin, N. G. - 379 Shutov, S. V. - 377 Shvetsov, A. I. - 246 Shvidchenko, L. G. - 446 Silva, A. - 77 Smirnov, N. N. - 530 Smirnova, L. I. - 562 Sokolova, M. M. - 43 Sokolovskii, V. V. - 478 Solov'eva, G. I. - 241 Sopina, V. A. - 347 Stepanov, E. V. - 408, 414 Stepanov, V. V. - 460 Stepanova, N. T. - 519 Steshenko, A. P. - 507 Stoiko, S. M. - 91 Striganova, B. R. - 455, 487 Surial', A. I. - 541

## T

Tarakanova, O. I. - 142

Tarasevich, L. F. - 222
Taryannikov, V. I. - 186
Tavrovskaya, T. V. - 142,
149
Tembotov, A. K. - 142, 149,
332
Tertyshnikov, M. F. - 237
Tkachev, A. V. - 115
Travleev, A. P. - 568
Tyshkevich, G. L. - 354

#### U

Urazaev, N. A. - 343 Utkin, A. I. - 202

#### 1

Valova, Z. G. - 360 Vinogradov, B. V. - 299 Vinokurov, V. N. - 379 Voronin, A. A. - 185 Voronin, R. N. - 470 Voznyakovskaya, Yu. M. - 74 V'yushkova, V. P. - 419

#### V

Yakovlev, S. N. - 460 Yurakhno, M. V. - 83

#### Z

Zaikova, V. A. - 241 Zakharov, A. A. - 327 Zhemukhova, E. Zh. - 142 Zlobin, Yu. A. - 266

## THE SOVIET JOURNAL OF ECOLOGY

Volume 7, Numbers 1-6, 1976

(A translation of Ékologiya)

Volume 7, Number 1 January-February, 1976

	Engl.	/Russ	
Mathematical Modeling of Populations of Planktonic Crustaceans — T. I. Prikhod'ko	1	5	
Population Regulation in Mammals — David E. Davis and John J. Christian  Natural Concentrations of <sup>210</sup> Pb and <sup>210</sup> Po in Plants of Steppe Phytocenoses	9	15	
<ul> <li>L. A. Ladinskaya, Yu. D. Parfenov, R. S. Arutyunov, and D. K. Popov</li> <li>Effect of Hydrothermal Conditions of Soil on Seasonal Development and Growth of Pine</li> </ul>	21	32	
and Birch Trees in the Forest of the II'men Reservation - B. A. Mironov	25	36	
Role of Fire in the Formation of Forest Soils — A. P. Sapozhnikov	29	42	
Biological Productivity of Herbaceous Communities of Zangezur — M. A. Iskandaryan Regularities in the Population Dynamics of Whitefish Acclimatized in the Urals	33	47	
- N. V. Nesterenko	37	52	
Invertebrates — M. M. Sokolova and A. G. Chernitskii	43	60	
Proletarskoe Reservoirs - E. K. Markova	48	66	
Spatial Structure of a Population of the Common Adder (Vipera berus) — Z. V. Belova Realtive Constancy of Artificially Formed Populational Groupings of Certain Species	53	71	
of Vole — T. V. Krylova, L. S. Khuras'kin, and D. G. Krylov	57	76	
Crustaceans — N. M. Kryuchkova  BRIEF COMMUNICATIONS	62	82	
Accumulation of Sr <sup>90</sup> and Cs <sup>137</sup> by Lichens under Experimental Conditions			
- M. G. Nifontova	68	89	
Photosynthesis of Arctic Mosses under Natural Conditions — A. P. D'yachenko Adaptation of the Anaerobic Pectin-Decomposing Soil Bacterium <u>Clostridium felsineum</u>	71	92	
to Living on Plants — Yu. M. Voznyakovskaya and N. P. Avrova	74	95	
and A. Silva	77	98	
The Ecology of Muroid Rodents of the Pamir - A. Odinashoev	80	100	
Isolation of Herds of Bering Sea Ringed Seal - M. V. Yurakhno and V. N. Popov	83	102	
Effect of Avalanches on the Fauna of Mountain Regions - S. A. Khapaev	86	104	
BOOK REVIEWS G. C. Varley, G. R. Gradwell, and M. P. Hassell. Insect Population Ecology; An			
Analytical Approach — Reviewed by P. M. Rafes	88	106	
A. Zlatnik and Colleagues. Zaklady Ekologie — Reviewed by S. M. Stoiko L. M. Sushchenya, Quantitative Characteristics of Crustacean Nutrition — Reviewed	91	108	
by A. V. Monakov.	93	109	
INFORMATION Seminar on Ecology of Atomic Power Plant (APP) Coolant Waters — M. Ya. Chebotina			
and I. V. Molchanova.	95	111	

# Volume 7, Number 2 March-April, 1976

Ecology and the National Economy	97	5
Relation between Ecosystem Components (Illustrated by an Investigation		
of the Correlation between Entomophilous Plants and the Composition of	0.0	-
the Population of Pollinator Bees) - Yu. A. Pesenko  Bioacoustic Signal Field as a Factor in Adaptive Behavior of Animals	98	7
-I. D. Nikol'skii	103	13
Ecology of Seacoast Grasses of the Far East-V. P. Seledets	107	19
Persistent Soil Frost in the Baskir Cis-Ural Region-Yu. Z. Kulagin	111	24
Role of Neuroendocrine Factors in Self-Regulation of Population Size		
-A. V. Tkachev	115	30
Is the Pond Frog Rana esculenta L. a Common Hybrid?—L. Berger	120	37
and N. V. Sheikina	. 125	4-1
-M. A. Beskrovnyi	135	5.5
Comparative Evaluation of Mechanisms of Adaptation to Hypoxia in Mountain and		
Plains Susliks of Northern Caucasus, I. Condition of Erythron		
-Z. I. Barbashova, T. V. Tavrovskaya, O. I. Tarakanova, E. Zh. Zhemukhova,		
A. K. Tembotov, P. V. Beloshitskii, G. F. Bogoslova, and I. Prokhazka	142	63
Comparative Evaluation of Mechanisms of Adaptation to Hypoxia in Mountain and		
Plains Susliks of Northern Caucasus. II. Resistance of the Organism and Its		
Tissues. Some Characteristics of the Endocrine System - Z. I. Barbashova,		
I. Prokhazka, I. V. Khavkina, T. V. Tavrovskaya, A. K. Tembotov, and		
I. V. Ivanov	149	71
BRIEF COMMUNICATIONS		
Flowering of the White Geranium in the Subalpine Belt-V. I. Polyakova	154	77
Relationship of Photosynthetic Carboxylation Pathways in Plants of the Artic	1.04	11
Tundra-S. K. Nazarov	157	80
Phytomass Reserve of Epigean Macrolichens in Several Mountain-Steppe	1.51	110
Communities of Khangai (Mongolian People's Republic) - L. G. Byazrov	159	81
Effect of Kuibyshev Reservoir on Vegetation in Sarala District of the Volga-Kama	1.00	172
State Reserve-N. A. Krasnov	162	84
Two Forms of Char of the Genus Salvelinus of Lake Bol'Shoe Shchuch'e (Polar	202	
Urals) - A. Z. Amstislavskii	164	86
Growth and Development of Larvae of the Mosquito Aedes caspius dorsalis	201	00
Mg. under Conditions of Various Density-L. S. Nekrasova	167	89
Role of Water and Food in the Entry of Certain Radionuclides into the Organism	201	
of the Pond Snail-D. P. Marchyulenene and G. G. Polikarpov	170	91
Behavior of Radioactive and Stable Isotopes of Calcium in the Soil-Solution-		
Plant System with Various Soil Moistening-E. N. Karavaeva and		
I. V. Molchanova	172	94
Accumulation of 90 Sr-90 Y by Developing Eggs and Larvae of Whitefish Coregonus		
lavaretus LN. V. Kulikov and L. N. Ozhegov	175	97
Amount of Phytomass Consumed and Stored by the Northern Pika in Old		
Siberian Pine Burns in Western Sayan-I. P. Khlebnikova	178	99
Parasite Pressure in Arthropods in the Dry-Steppe Biocenose of Southeastern		
Altai-D, I. Berman and A. P. Kononenko	181	102
Interaction of Phytoplankton and Zooplankton in Bodies of Water of Various Trophic		
Levels-L. P. Sal'nikov and T. A. Nikolaeva	183	104
Bloodless Method for Study of Amphibian Nutrition-S. S. Pisarenko and		
A. A. Voronin	185	106

	Engl./	Russ.
Reproduction of the Jackal (Canis aureus aureus L.) in Central Asia		
-V. I. Taryannikov	186	107
BOOK REVIEWS Geochemical Ecology, Sketches, V. V. Koval'skii - Reviewed by N. P. Naumov	188	108
CHRONICLES All-Union Conference of Myrmecologists-A. D. Pokarzhenskii	192	112
Volume 7, Number 3 May-June, 1976		
Model of 90Sr Cycling in a Forest Biogeocenose - R. M. Aleksakhin, L. R. Ginzburg,		
I. G. Mednik, and V. M. Prokhorov	195	5
Forest Biogeocenoses of the Geocryogenic Region as Specific Systems - A. I. Utkin Cycling of Organic Matter, Nitrogen, Ash Elements, and Energy in a Typical	202	15
Community of the Northern Aral Sea Region - I. M. Anapiev	208	23
Allelopathic Activity of Plants Cultivated on Coal Ash – G. P. Seraya Significance of Size and Shape of Harvest Plots for Determing Herbage Production	212	27
in Meadow Communities - G. D. Dymina	217	34
Utilization of a Dendrogram to Separate Associated Groups of Species - B. M. Mirkin,		
L. G. Naumova, G. S. Rosenberg, and L. F. Tarasevich	222	40
Role of Voles in the Movement of DDT in Forest Biocenoses - L. R. Michurina	228	46
Ecology of the Sandwich Tern ( <u>Thalasseus sandvicensia</u> LATII.) at the Boundary of the Distribution Range – A. N. Poslavskii and G. A. Krivonosov	222	51
Influence of Weather and Climate on Activity of Sand and Varicolored Lizards	232	31
- M. F. Tertyshnikov	237	57
Correlative Relations of Soil Nematodes in Meadow Biogeocenoses of Karelia		
- G. I. Solov'eva, V. D. Lopatin, V. A. Zaikova, and V. V. Ershov	241 246	62 69
Participation of Infusorians in Utilization of Phytoplankton Production in Rybinsk	240	03
Reservoir - E. B. Pavel'eva and N. V. Mamaeva	252	76
	202	
IN THE ECOLOGICAL LABORATORIES	050	01
Ecological Investigations at Kazbeg High-Mountain Station - G. Sh. Nakhutsrishvili	256	81
BRIEF COMMUNICATIONS		
Phytoindication by Mosaicity of the Plant Cover of Young Tectonic Uplifts in Piedmont		
Plains of Turkmenia – É. A. Ataev Effect of Green Plantings on the Microclimate and Sanitary-Hygiene Condition of Ground	261	87
Layers of Air near Metallurgical Works - M. L. Reva and R. Ya. Filatova	264	89
Spatial Variability of Ecological Conditions in Cuttings - Yu. A. Zlobin	266	91
Summer-Autumn Nesting of Crossbills in Tien Shan as an Adaptation of a Stenophagous		
Species to the Conditions of Existence - A. F. Kovshar'	269	94
Dynamics of Numbers and Flight Activity of Orchard Tortricid Moths in Ukrainian		
Forest-Steppe - V. P. Pristavko, V. L. Petrunek, and N. P. Petrunek Population Dynamics of Partridge in the Foothills of the Northern Caucasus	272	97
- G. A. Loshkarev	275	100
Determining Biomass of Mollusks Consumed by Muskrat - V. V. Shiryaev	276	101
Ecology of Rana terrestris in Tuva - Yu. M. Korotkov and E. B. Korotkova	278	102
Diurnal Rhythm of Mitoses in the Corneal Epithelium of Phoxinus perchurus under		
Natural Conditions - A. Z. Amstislavskii	279	103
Dependence of Vertical Migration of Strontium 90 in Soil on the Regime of Soil  Moistening – I. V. Molchanova and E. N. Karavaeva	201	105
morouning I. v. morenanova and E. N. Karavaeva	281	LUO

BOOK REVIEWS		
F.V. Fedorova. Relationships in the Entrance, Elimination, and Biological Effect of <sup>14</sup> C Radiocarbon at Various Stages of Ontogeny of Freshwater Fish – Reviewed by	202	1.05
R. M. Aleksakhin	283	107
at Its Restoration - Reviewed by P. L. Gorchakovskii	284	108
en Desarrollo en Ecologia Tropical (Index of Current Tropical Ecology Research)		
- Reviewed by V. M. Neronov	286	109
INFORMATION Ukrainian Conference of Biogeocenologists - Ya. P. Odinak First All-Union Conference - Semminar on the Phenetics of Populations	287	110
- Yu. I. Novozhenov	289	111
V. 1 7 . V 1 4 T. I		
Volume 7, Number 4 July-August, 1976		
Development of an Ecological Biochemistry - K. M. Khailov	901	-
and T. A. Aizatullin	291	5
of the Contemporary Plant Cover - B. V. Vinogradov	. 299	14
Community - V. I. Ermolaev	306	24
- B. A. Bykov	311	29
Process of Forest Formation - M. V. Pridnya	318	38
Ecological Nature of Differences in Electrolyte Compsition of Blood of Natrix tessellata and Natrix natrix - O. A. Monastyrskii and O. P. Bogdanov	324	45
Migrations of Worker Ants of Formica lugubris in an Artificial Nest		
- A. A. Zakharov	327	49
and Lowland Populations of the Northern Caucasus – G. I. Grigor'eva, V. G. Leont'ev, and A. K. Tembotov	332	
Characteristics of the Ecology of Synanthropic Calliphorids (Diptera,	332	55
Calliphoridae) of the Maritime Territory - B. K. Petrova	338	62
Ecology and Pathology of Agricultural Animals — N. A. Urazaev	343	69
- V. A. Sopina	347	74
- N. A. Bakunov and S. N. Garanina	350	78
BRIEF COMMUNICATIONS Influence of Ecological Conditions on the Anatomical Structure of Beech Leaves		
- G. L. Tyshkevich	354	82
Influence on Trampling on Vegetation of Forest Meadow and Whortleberry Moss		
Pine Forest Cenoses - T. V. Rogova	356	84
- Z. G. Valova	360	87
decemlineata Say S. S. Izhevskii	363	90
Structure of the Wintering-Pond Biogeocenose - G. I. Ogurtsov and V. I. Klimov Osmotic Regulation in the Brackish-Water Mysid Neomysis integer (Leach.)	366	92
- M. A. Bobovich	<b>36</b> 8	94
- V. S. Balakhonov	370	96

Use of Positive Phototaxis of Larvae of the Shield Bug Eurygaster integriceps Put.  during Cultivation on Nutrient Media - E. D. Khlistovskii and V. Ya. Ismailov	480	104
BOOK REVIEWS	400	104
T. A. Rabotnov. Meadow Science - Reviewed by K. A. Kurkin	483	107
- Reviewed by N. V. Peshkova	485	109
INFORMATION International Symposium on Soil Zoology in Warsaw - B. P. Striganova	405	111
mternational Symposium on Soil Zoology in warsaw - B. P. Striganova	487	111
Volume 7, Number 6 November-December, 1976		
Quantitative Study of Animal Territorial-Exploratory Behavior		
- L. N. Erdakov and V. I. Shadrina	489	5
- L. Foulquier and A. Grauby	495	12
- A. P. Steshenko	507	27
- V. N. Golubev and V. G. Kobechinskaya	513	35
Fungi - V. A. Mukhin and N. T. Stepanova	519	42
Drying Sections of Bottom of the Caspian and Aral Seas - B. B. Berdyev  Temperature and Moisture as Ecological Factors in the Biological Activity of Soils	. 522	46
- F. Kh. Khaziev	525	50
Historical Biocenology of Cladoceran Crustaceans - N. N. Smirnov	530 535	56 63
Fractional Composition of Hemoglobin of the Blood of Anadromous and Freshwater Species of Sturgeon Fishes - V. I. Luk'vanenko, P. P. Geraskin,	000	00
and A. I. Surial'	541	71
BRIEF COMMUNICATIONS		
Prognostication of the Onset of Phenological Phases in Species of the Family		
Vacciniaceae in Belorussia - V. B. Gedykh	547	78
Quantitative Estimate of the Biotopic Isolation of Birds of a Single Genus under Conditions of Sympatry – E. G. Lobkov.	550	80
Characteristics of Accumulation of Strontium 90 and Cesium 137 by Certain Species	330	00
of Moss - N. V. Kulikov, N. V. Bochenina, and I. V. Molchanova	552	82
Factors in Daily Elk Migrations – V. M. Glushkov	554	85
- I. I. Eshelkin and S. M. Purtov	556	87
Influence of Hydrothermic Regime on the Reproduction of the Great Gerbil in		
Northwestern Kyzyl-Kum - A. F. Alekseev and G. A. Asenov  Dependence between Body Size and Relative Weight of the Heart in Cricetids and	558	89
Jerboas - L. S. Marinina  Bile Color Index as an Indicator of the Physiological Condition of Fish	560	91
- L. I. Smirnova	562	93
Spawning Pond - V. I. Belyaev	565	95
BOOK REVIEWS  S. V. Zonn and T. F. Livishadae, Scientific Pages and Methodological Instructions		
S. V. Zonn and T. F. Urushadze. Scientific Bases and Methodological Instructions for the Biogeocenotic Study of the Soils of Mountain Forests		
- Reviewed by A. P. Trayleev	568	99

Engl./Russ.

		Engl./Russ.	
Polish Ecological Studies - Reviewed by N. V. Peshkova	570	100	
- Reviewed by R. M. Aleksakhin	571	101	
INFORMATION			
Workshop on Ecological Bioenergetics - G. V. Kuznetsov and M. V. Glazov Problem of Ecological Prognostigation at the All-Union Conference "Methodological Bases of the Theory of Transformation of the Biosphere" (Sverdlovsk,	573	103	
November, 1975) - Yu. Z. Kulagin	575	105	
INDEX			
Author Index, Volume 7, Numbers 1-6, 1976	579 581		



